

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-11 (Cancelled)

12. (Currently Amended) A carbon heating element comprising carbon acting as a good conductor and boron nitride acting as a conductivity-inhibiting material, said boron nitride being uniformly dispersed in said carbon.

13. (Previously Presented) A carbon heating element according to claim 12, wherein the carbon is obtained by firing organic substances.

14. (Previously Presented) A carbon heating element according to claim 12, further comprising carbon powder acting as a good conductor.

15. (Previously Presented) A carbon heating element according to claim 12, wherein the carbon heating element has a rectangular cross section.

16. (Previously Presented) A carbon heating element according to claim 12, wherein the carbon heating element is enclosed in a vessel filled with an inert gas.

17. (Currently Amended) A carbon heating element comprising carbon acting as a good conductor and boron nitride acting as a conductivity-inhibiting material, wherein the carbon heating element has a specific resistance of about  $4.5$  to about  $7.5 \times 10^{-3} \Omega \cdot \text{cm}$ , said boron nitride being uniformly dispersed in said carbon.

18. (Previously Presented) A carbon heating element according to claim 17, wherein the carbon heating element has a specific resistance of about  $4.5 \times 10^{-3} \Omega \cdot \text{cm}$ .

19. (Previously Presented) A carbon heating element according to claim 17, wherein the carbon heating element has a specific resistance of about  $7.5 \times 10^{-3} \Omega\cdot\text{cm}$ .
20. (Previously Presented) A carbon heating element according to claim 12, wherein the carbon heating element has a specific resistance of about  $0.3 \times 10^{-3} \Omega\cdot\text{cm}$ .
21. (Previously Presented) A carbon heating element according to claim 15, wherein the carbon heating element has a specific resistance of about 4.5 to about  $7.5 \times 10^{-3} \Omega\cdot\text{cm}$ .
22. (Previously Presented) A carbon heating element according to claim 15, wherein the carbon heating element has a specific resistance of about  $4.5 \times 10^{-3} \Omega\cdot\text{cm}$ .
23. (Previously Presented) A carbon heating element according to claim 15, wherein the carbon heating element has a specific resistance of about  $7.5 \times 10^{-3} \Omega\cdot\text{cm}$ .
24. (Currently Amended) A carbon heating element comprising carbon acting as a good conductor and a metal or a metalliod compound acting as a conductivity-inhibiting material, wherein the carbon heating element has a rectangular cross section, said metal or a metalliod compound being uniformly dispersed in said carbon.
25. (Previously Presented) A carbon heating element according to claim 24, wherein the carbon heating element is enclosed in a vessel filled with an inert gas.
26. (Currently Amended) A method of making a carbon heating element, comprising: forming a carbon heating element comprising carbon acting as a good conductor and boron nitride acting as a conductivity-inhibiting material, wherein said carbon is obtained by firing organic substances, said boron nitride being uniformly dispersed in said carbon.

27. (Previously Presented) A method of making a carbon heating element according to claim 26, wherein the organic substances yield carbonization of at least 5% after firing.

28. (Previously Presented) A method of making a carbon heating element according to claim 26, wherein the organic substances comprise polyvinyl chloride and furan resin.

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)